

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently amended) A method of coordinating magnetic resonance imaging (MRI) with operation of an implantable medical device (IMD), comprising: ~~[[;]]~~
receiving, via wireless telemetry, sending a control signal ~~to the IMD~~ prior to delivery of an electromagnetic radiation burst[[s]] to a patient in whom the IMD is implanted; and
~~delivering electromagnetic radiation bursts to the patient; and~~
responsive to receipt of the control signal by the IMD ~~(IMD)~~, blanking one or more components of the IMD ~~(IMD)~~ for a time period including at least the period beginning prior to and including delivery of the electromagnetic radiation burst[[s]] to the patient.
2. (Cancelled)
3. (Currently amended) The method of claim 1, wherein receiving ~~sending~~ the control signal comprises receiving ~~sending~~ the control signal directly from the ~~from an~~ MRI device via wireless telemetry ~~to cause the blanking~~.
4. (Currently amended) The method of claim 1, wherein receiving ~~sending~~ the control signal comprises receiving ~~sending~~ the control signal from a programmer device ~~via wireless telemetry to cause the blanking~~.
5. (Currently amended) The method of claim 1, wherein the control signal indicates [[a]] timing information for application of the electromagnetic radiation bursts and blanking the one or more components of the IMD comprises blanking the one or more components consistent with the timing information.

6. (Cancelled)

7. (Currently amended) The method of claim 5, wherein the timing information ~~control signal~~ comprises an indication of a start time of one or more of the electromagnetic radiation bursts.

8. (Currently amended) The method of claim 7, wherein the timing information ~~control signal~~ comprises an indication of a duration of one or more of the electromagnetic radiation bursts.

9. (Previously presented) The method of claim 1, wherein blanking the one or more components of the IMD includes disabling one or more sensing components of the IMD for a period of time and re-enabling the one or more sensing components following the period of time.

10. (Previously presented) The method of claim 9, wherein blanking the one or more components of the IMD includes disabling one or more sensing amplifiers of the IMD for the period of time and enabling the one or more sensing amplifiers following the period of time.

11. (Currently amended) An implantable medical device (IMD) comprising:

a receiver to receive, via wireless telemetry, a control signal produced by a magnetic resonance imaging (MRI) system prior to application of an MRI electromagnetic radiation burst; and

a control unit that in response to the control signal, blanks one or more components the IMD ~~(IMD)~~ for a time period including at least the beginning prior to ~~and including~~ application of an MRI electromagnetic radiation burst delivered by the MRI system.

12. (Currently amended) The device of claim 11, wherein the control signal indicates [[a]] timing information for application of ~~the one or more~~ electromagnetic radiation burst[[s]] and the control unit blanks the one or more components of the IMD consistent with the timing information.

13. (Cancelled)

14. (Cancelled)

15. (Currently amended) The device of claim 11 [[14]], wherein the control signal comprises a signal used by the IMD to define blanking duration of the components of the IMD.

16. (Cancelled)

17. (Currently amended) The device of claim 12 [[11]], wherein the timing information ~~control signal~~ provides an indication of a start time of the MRI electromagnetic radiation burst.

18. (Currently amended) The device of claim 14, wherein the timing information ~~control signal~~ provides an indication of a duration of the MRI electromagnetic radiation burst.

19. (Previously presented) The device of claim 11, wherein the control unit blanks the one or more components of the IMD by disabling one or more sensing components of the IMD for a period of time and enabling the one or more sensing components following the period of time.

20. (Previously presented) The device of claim 19, wherein the control unit blanks the one or more components of the IMD by disabling one or more sensing amplifiers of the

IMD for the period of time and enabling the one or more sensing amplifiers following the period of time.

21. (Previously presented) The device of claim 11, wherein the IMD is selected from the group consisting of:

an implantable cardiac pacemaker, an implantable defibrillator, an implantable cardioverter, an implantable pacemaker-defibrillator-cardioverter, an implantable sensing device; an implantable monitor; an implantable muscular stimulator; an implantable nerve stimulator; an implantable deep brain stimulator, an implantable gastric stimulator, an implantable colon stimulator, an implantable agent dispenser, and an implantable recorder.

22. (Cancelled)

23. (Currently amended) A system comprising:

a magnetic resonance imaging (MRI) device including a transmitter to transmit, via wireless telemetry, a control signal relating to application of an MRI electromagnetic radiation burst from the MRI device prior to application of the MRI electromagnetic radiation burst; and

an implantable medical device (IMD) including:

a receiver to receive, via wireless telemetry, the control signal produced by the MRI system prior to application of an MRI electromagnetic radiation burst;
and

a control unit responsive to the control signal to blank one or more components of the IMD for a time period including at least the beginning prior to ~~and including~~ application of the MRI electromagnetic radiation burst.

24. (Previously presented) The system of claim 23, wherein the receiver receives the control signal directly from the MRI device.

25. (Currently amended) The system of claim 23, further comprising a programmer device, wherein the MRI device transmits the control signal to the programmer device, and the receiver of the IMD receives the control signal from the programmer device.
26. (Previously presented) The system of claim 23, wherein the control signal comprises a signal used by the IMD to define blanking of components of the IMD.
27. (Previously presented) The system of claim 23, wherein the control signal provides an indication of a start time of the MRI electromagnetic radiation burst.
28. (Previously presented) The system of claim 23, wherein the control signal provides an indication of a duration of the MRI electromagnetic radiation burst.
29. (Previously presented) The system of claim 23, wherein the control unit blanks the one or more components of the IMD by disabling one or more sensing components of the IMD for a period of time and enables the one or more sensing components following the period of time.
30. (Previously presented) The system of claim 29, wherein the control unit blanks the one or more components of the IMD by disabling one or more sensing amplifiers of the IMD for a period of time and enabling the one or more sensing amplifiers following the period of time.
31. (Currently amended) A system comprising:
a programmer device defining timing for application of a magnetic resonance imaging (MRI) electromagnetic radiation burst and generating [[a]] first and second signals indicative thereof;
an MRI device responsive to the first signal and applying the electromagnetic radiation burst according to the timing indicated by the first signal; and

an implantable medical device (IMD) to receive ~~[[a]]~~ the second signal from the programmer and blank one or more components of the IMD for a time period ~~beginning prior to and including at least the~~ application of the MRI electromagnetic radiation burst.

32. (Original) The system of claim 31, wherein the first and second signals comprise an indication of a start time of the MRI electromagnetic radiation burst.

33. (Original) The system of claim 31, wherein the first and second signals comprise an indication of a duration of the MRI electromagnetic radiation burst.

34. (Cancelled)

35. (Cancelled)

36. (Cancelled)

37. (Cancelled)

38. (Cancelled)

39. (Currently amended) The system of claim 31, wherein ~~the control unit blanks the one or more components of the IMD include by disabling one or more sensing components, and the IMD disables the one or more sensing components~~ of the IMD for a period of time and enables ~~enabling~~ the one or more sensing components following the period of time.

40. (Currently amended) The system ~~device~~ of claim 39 ~~34~~, wherein the ~~control unit~~ blanks the one or more sensing components ~~of the IMD by disabling~~ comprise one or more sensing amplifiers ~~of the IMD for the period of time and enabling the one or more sensing amplifiers following the period of time.~~

41. (Previously presented) The device of claim 11, wherein the IMD is selected from the group consisting of:

an implantable cardiac pacemaker, an implantable defibrillator, an implantable cardioverter, an implantable pacemaker-defibrillator-cardioverter, an implantable sensing device; an implantable monitor; an implantable muscular stimulator; an implantable nerve stimulator; an implantable deep brain stimulator, an implantable gastric stimulator, an implantable colon stimulator, an implantable agent dispenser, and an implantable recorder.

42. (New) The method of claim 1, wherein blanking one or more components of the IMD for a time period including at least the delivery of the electromagnetic radiation burst to the patient comprises blanking one or more components of the IMD for a time period beginning prior to and including delivery of the electromagnetic radiation burst to the patient.

43. (New) The device of claim 11, wherein the control unit blanks one or more components of the IMD for a time period beginning prior to and including delivery of the electromagnetic radiation burst to the patient.

44. (New) The system of claim 23, wherein the control unit blanks one or more components of the IMD for a time period beginning prior to and including delivery of the electromagnetic radiation burst to the patient.

45. (New) The system of claim 31, wherein the IMD blanks one or more components of the IMD for a time period beginning prior to and including delivery of the electromagnetic radiation burst to the patient.